

Product Discontinuation Notices

Programmable Controllers

Issue Date
March 3, 2014

No. 2013041CE(2)

Discontinuation Notice of Programmable Controllers CPM1A series and CPM2A series.

<< REQUEST >>

There was modification in portion of Product Discontinuation notices of Product News No. 2013041CE of November, 2013 issue. What we have changed is as follows; the addition of the recommended replacement model, the description of wire connection and dimensions for additional replacement model. Please abolish old edition, replace the latest No. 2013041CE(2).

Product Discontinuation

Programmable Controllers



Model CPM1A series
Model CPM2A series



Recommended Replacement

Programmable Controllers

Model CP1E series

[Discontinuation date]

The end of March, 2015

[Caution on recommended replacement]

CPM1A and CPM2A programmable controller will be discontinued to manufacture and therefore should be replaced with CP1E programmable controller.

- The dimensions, wire connection and characteristics etc. are different between CPM[A] and CP1E, so it is necessary to modify the user program and wire connection etc.
- It is possible to convert the user program in CX-Programmer but it is necessary to change some parts of the user program.
- The depth dimension of the CP1E is a little larger compared to CPM1A and CPM2A CPU unit.
- The CPM1A and CP1W expansion units are the same except for body color.

For more details, please refer to the "Replacement guide from CPM1A and CPM2A to CP1E".

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimen-sions	Wire connection	Mounting Dimensions	Charact-eristics	Operation ratings	Operation methods
CP1E series	--	--	--	--	--	--	--

** : Compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

[Product Discontinuation and recommended replacement]

CPM1A CPU unit

Product discontinuation	Recommended replacement
CPM1A-10CDR-A-V1	CP1E-E10DR-A
CPM1A-10CDR-D-V1	CP1E-E10DR-D
CPM1A-10CDT1-A-V1	CP1E-E10DT1-A
CPM1A-10CDT1-D-V1	CP1E-E10DT1-D
CPM1A-10CDT-A-V1	CP1E-E10DT-A
CPM1A-10CDT-D-V1	CP1E-E10DT-D
CPM1A-20CDR-A-V1	CP1E-N20DR-A
CPM1A-20CDR-D-V1	CP1E-N20DR-D
CPM1A-20CDT1-A-V1	CP1E-N20DT1-A
CPM1A-20CDT1-D-V1	CP1E-N20DT1-D
CPM1A-20CDT-A-V1	CP1E-N20DT-A
CPM1A-20CDT-D-V1	CP1E-N20DT-D
CPM1A-30CDR-A-V1	CP1E-N30DR-A CP1E-N30SDR-A
CPM1A-30CDR-D-V1	CP1E-N30DT-D
CPM1A-30CDT1-A-V1	CP1E-N30DT1-A
CPM1A-30CDT1-D-V1	CP1E-N30DT1-D CP1E-N30SDT1-D
CPM1A-30CDT-A-V1	CP1E-N30DT-A
CPM1A-30CDT-D-V1	CP1E-N30DT-D CP1E-N30SDT-D
CPM1A-40CDR-A-V1	CP1E-N40DR-A CP1E-N40SDR-A
CPM1A-40CDR-D-V1	CP1E-N40DR-D
CPM1A-40CDT1-A-V1	CP1E-N40DT1-A
CPM1A-40CDT1-D-V1	CP1E-N40DT1-D CP1E-N40SDT1-D
CPM1A-40CDT-A-V1	CP1E-N40DT-A
CPM1A-40CDT-D-V1	CP1E-N40DT-D CP1E-N40SDT-D

CPM2A CPU unit

Product discontinuation	Recommended replacement
CPM2A-20CDR-A	CP1E-N20DR-A
CPM2A-20CDR-D	CP1E-N20DR-D
CPM2A-20CDT1-D	CP1E-N20DT1-D
CPM2A-20CDT-D	CP1E-N20DT-D
CPM2A-30CDR-A	CP1E-N30DR-A CP1E-N30SDR-A CP1E-N30S1DR-A
CPM2A-30CDR-D	CP1E-N30DR-D
CPM2A-30CDT1-D	CP1E-N30DT1-D CP1E-N30SDT1-D CP1E-N30S1DT1-D
CPM2A-30CDT-D	CP1E-N30DT-D CP1E-N30SDT-D CP1E-N30S1DT-D
CPM2A-40CDR-A	CP1E-N40DR-A CP1E-N40SDR-A CP1E-N40S1DR-A
CPM2A-40CDR-D	CP1E-N40DR-D
CPM2A-40CDT1-D	CP1E-N40DT1-D CP1E-N40SDT1-D CP1E-N40S1DT1-D
CPM2A-40CDT-D	CP1E-N40DT-D CP1E-N40SDT-D CP1E-N40S1DT-D
CPM2A-60CDR-A	CP1E-N60DR-A CP1E-N60SDR-A CP1E-N60S1DR-A
CPM2A-60CDR-D	CP1E-N60DR-D
CPM2A-60CDT1-D	CP1E-N60DT1-D CP1E-N60SDT1-D CP1E-N60S1DT1-D
CPM2A-60CDT-D	CP1E-N60DT-D CP1E-N60SDT-D CP1E-N60S1DT-D

CPM1A Expansion I/O unit

Product discontinuation	Recommended replacement
CPM1A-20EDR1	CP1W-20EDR1
CPM1A-20EDT	CP1W-20EDT
CPM1A-20EDT1	CP1W-20EDT1
CPM1A-40EDR	CP1W-40EDR
CPM1A-40EDT	CP1W-40EDT
CPM1A-40EDT1	CP1W-40EDT1
CPM1A-8ED	CP1W-8ED
CPM1A-8ER	CP1W-8ER
CPM1A-8ET	CP1W-8ET
CPM1A-8ET1	CP1W-8ET1

CPM1A Expansion unit

Product discontinuation	Recommended replacement
CPM1A-AD041	CP1W-AD041
CPM1A-DA041	CP1W-DA041
CPM1A-MAD01	CP1W-MAD11
CPM1A-MAD11	CP1W-MAD11
CPM1A-SRT21	CP1W-SRT21
CPM1A-TS001	CP1W-TS001
CPM1A-TS002	CP1W-TS002
CPM1A-TS101	CP1W-TS101
CPM1A-TS102	CP1W-TS102



Communication adapter

Product discontinuation	Recommended replacement
CPM1-CIF01	CP1W-CIF01
CPM1-CIF11	CP1W-CIF11

Expansion Memory Unit

Product discontinuation	Recommended replacement
CPM1-EMU01-V1	CP1W-ME05M

[Body color]

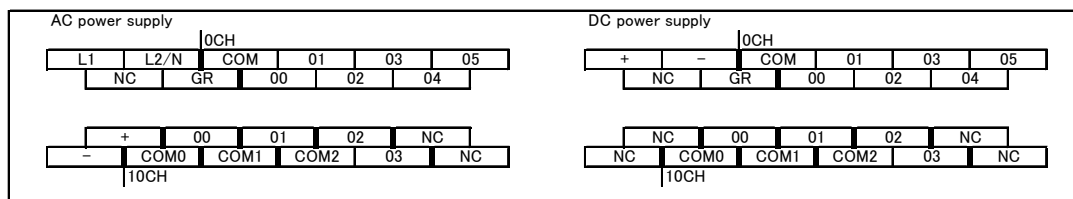
Product discontinuation Model CPM1A, CPM2A series	Recommendable replacement Model CP1E series
	

[Wire connection]

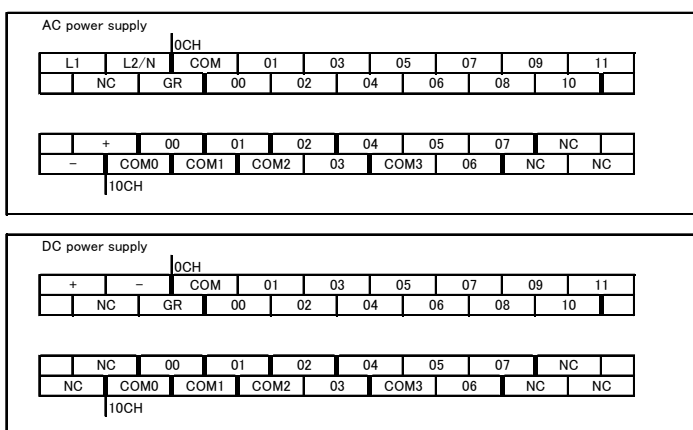
Product discontinuation
Model CPM1A, CPM2A series

CPM1A CPU unit terminal block layout

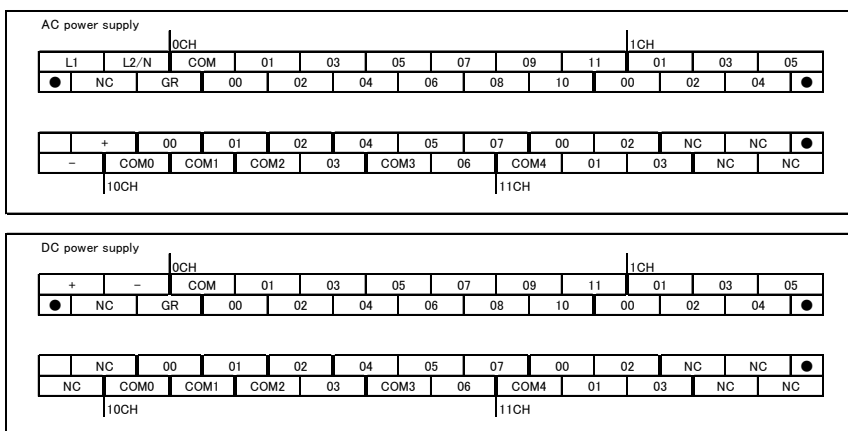
CPM1A-10□□-□: Fixed terminal block



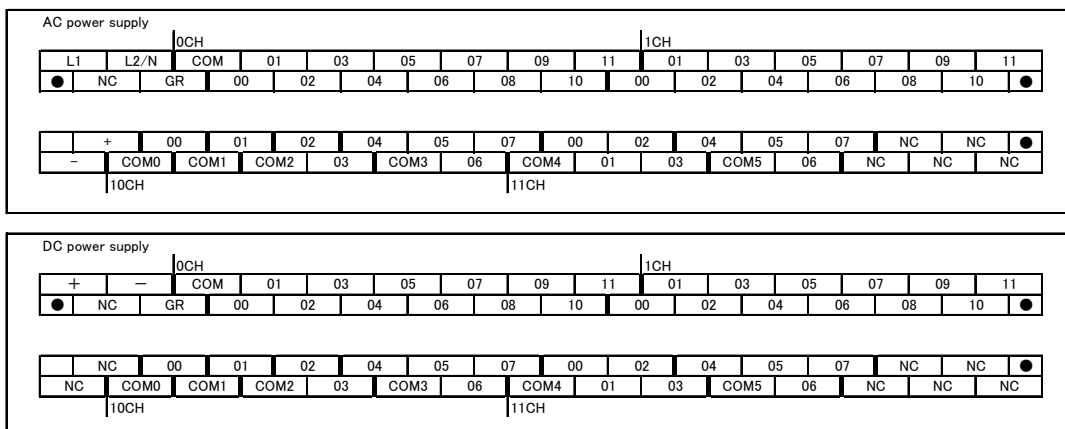
CPM1A-20□□-□: Fixed terminal block



CPM1A-30□□-□: Fixed terminal block



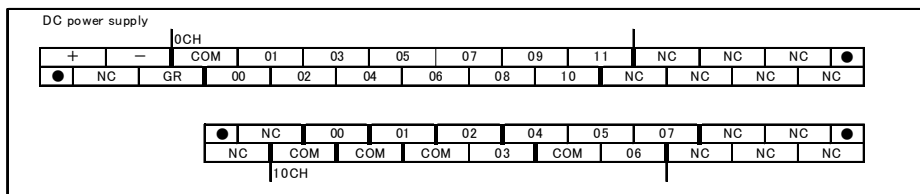
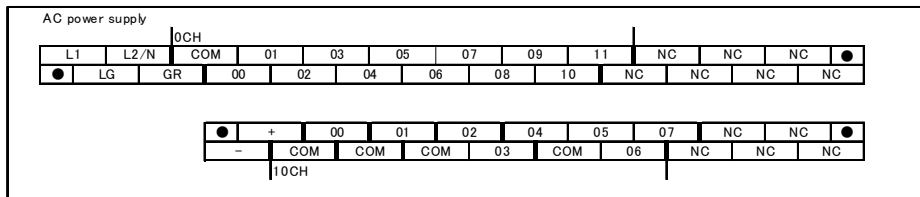
CPM1A-40□□-□: Fixed terminal block



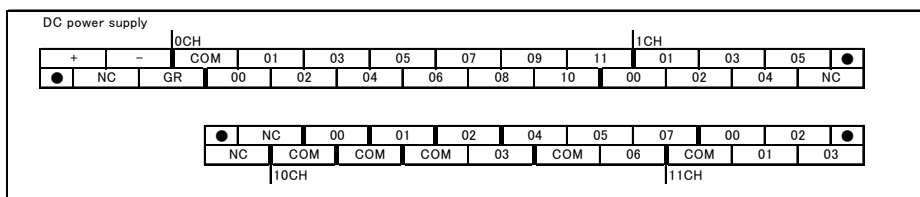
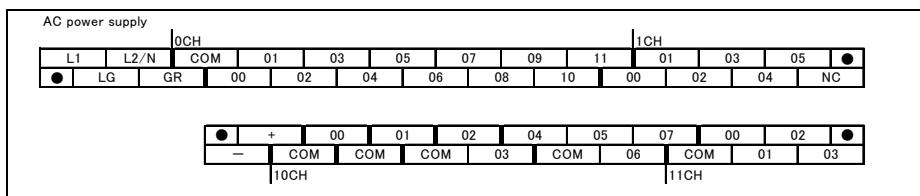
Product discontinuation
Model CPM1A, CPM2A series

CPM2A CPU unit terminal block layout

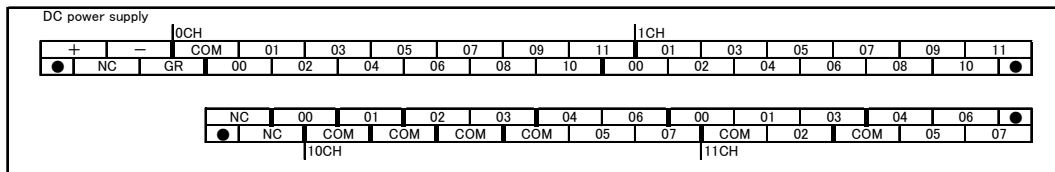
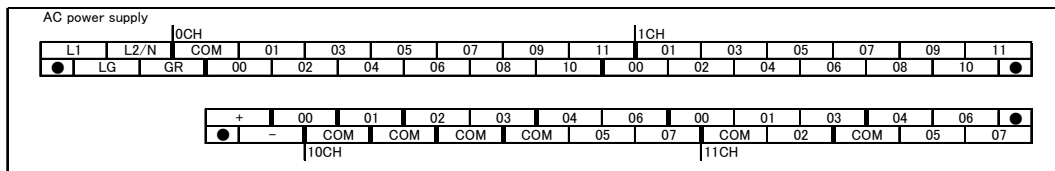
CPM2A-20[]-[]: Removable terminal block



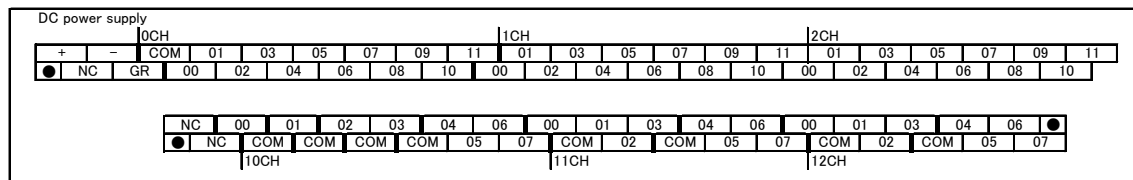
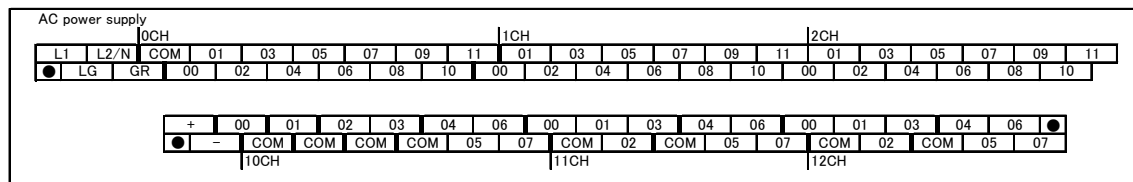
CPM2A-30[]-[]: Removable terminal block



CPM2A-40[]-[]: Removable terminal block



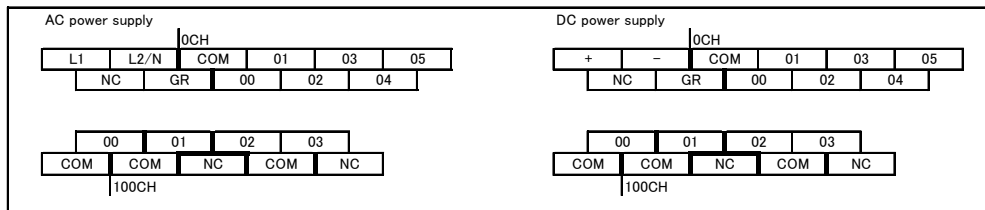
CPM2A-60[]-[]: Removable terminal block



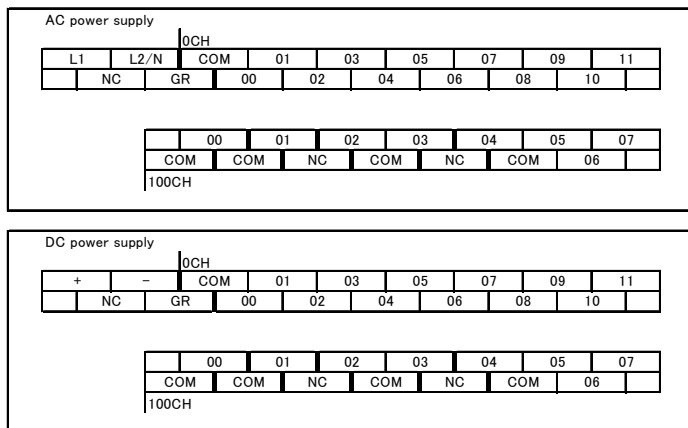
Recommendable replacement
Model CP1E series

CPE1 CPU unit terminal block layout

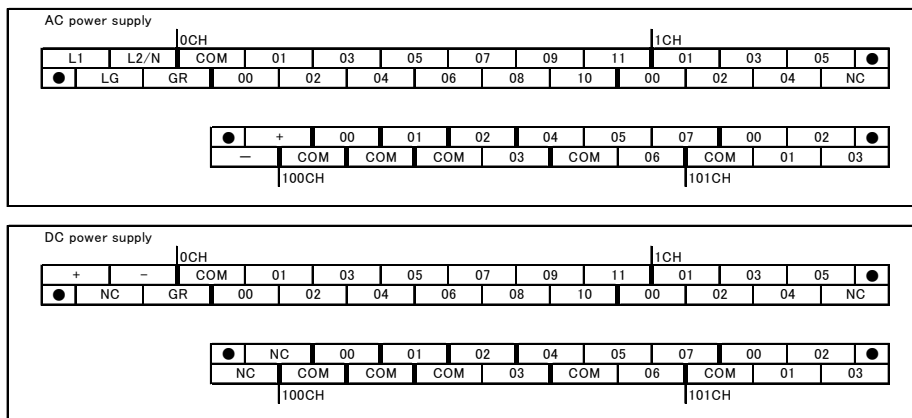
CP1E-E10[]-[]: Fixed terminal block



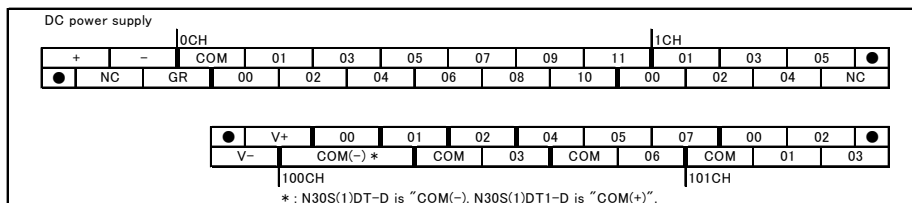
CP1E-[]20[]-[]: Fixed terminal block



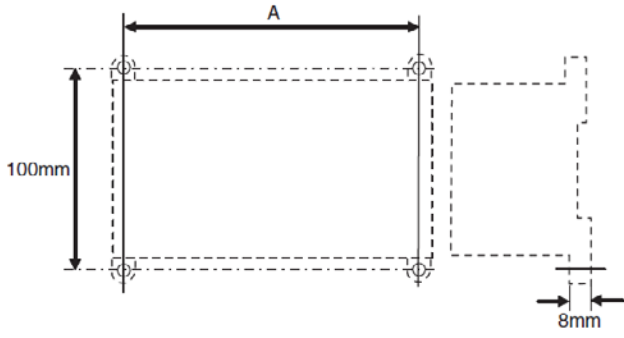
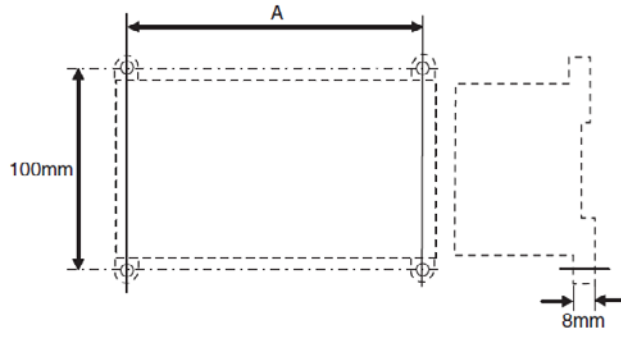
CP1E-[]30[]-[]: Fixed terminal block (Except for CP1E-[]30S(1)DT[]-D)



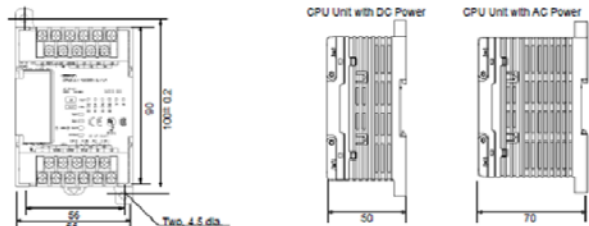
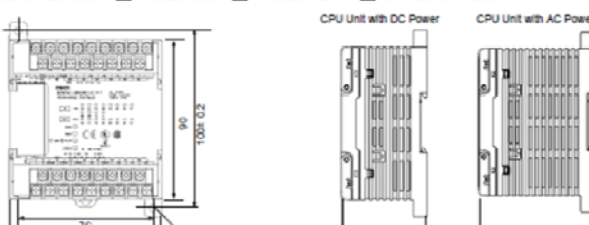
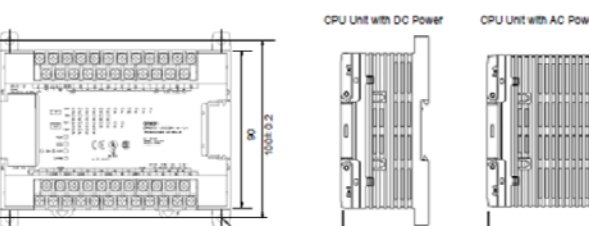
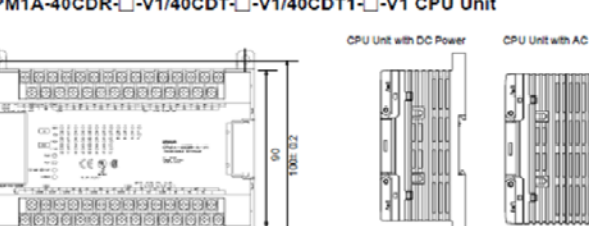
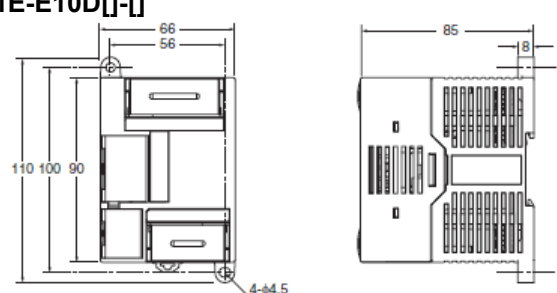
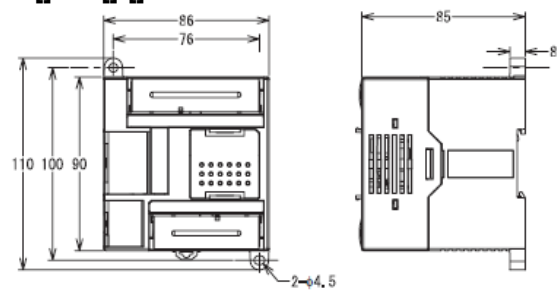
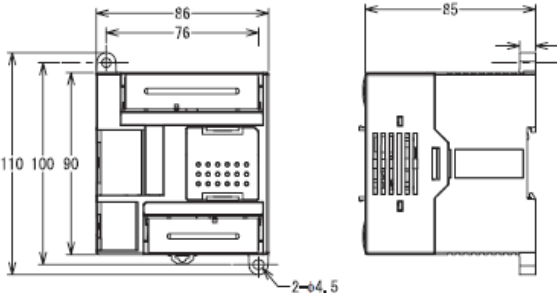
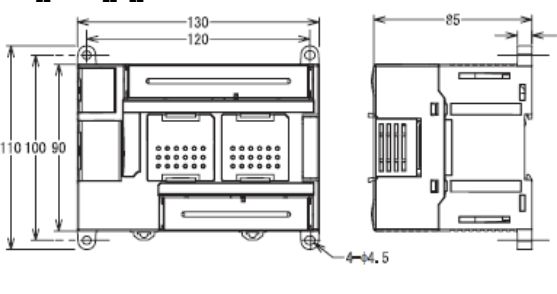
CP1E-[]30S(1)DT[]-D: Fixed terminal block



[Mounting dimensions]

Product discontinuation Model CPM1A, CPM2A series		Recommendable replacement Model CP1E series	
DIN Track Installation Surface Installation 		DIN Track Installation Same as CPM1A. Surface Installation Mounting hole pitch size is same except for CPM2A-20□□-□. 	
Unit		Mounting hole pitch A	
CPM1A CPU units	CPM1A-10□□-□	56±0.2mm	
	CPM1A-20□□-□	76±0.2mm	
	CPM1A-30□□-□	120±0.2mm	
	CPM1A-40□□-□	140±0.2mm	
CPM2A CPU Units	CPM2A-20□□-□	120±0.2mm	
	CPM2A-30□□-□	120±0.2mm	
	CPM2A-40□□-□	140±0.2mm	
Expansion I/O units	CPM1A-8E□	56±0.2mm	
	CPM1A-20ED□	76±0.2mm	
	CPM1A-40ED□	140±0.2mm	
Expansion units	CPM1A-MAD01	56±0.2mm	
	CPM1A-MAD11	76±0.2mm	
	CPM1A-AD041		
	CPM1A-DA041		
	CPM1A-TS□□	76±0.2mm	
CPM1A-SRT21	56±0.2mm		
Unit		Mounting hole pitch A	
CP1E CPU units	CP1E-□10□□-□	56±0.2mm	
	CP1E-□20□□-□	76±0.2mm	
	CP1E-□30□□-□	120±0.2mm	
	CP1E-□40□□-□	140±0.2mm	
	CP1E-□60□□-□	185±0.2mm	
Expansion I/O units	CP1W-8E□	56±0.2mm	
	CP1W-20ED□	76±0.2mm	
	CP1W-40ED□	140±0.2mm	
Expansion units	CP1W-MAD11	76±0.2mm	
	CP1W-AD041		
	CP1W-DA041		
	CP1W-TS□□	76±0.2mm	
CP1W-SRT21	56±0.2mm		

[Dimensions]

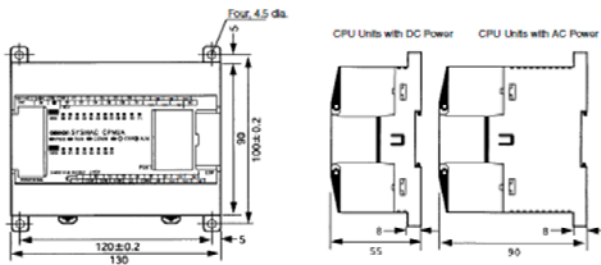
<p>Product discontinuation Model CPM1A, CPM2A series</p>	<p>Recommendable replacement Model CP1E series</p>
<p>CPM1A CPU units CPM1A-10CDR-□-V1/10CDT-□-V1/10CDT1-□-V1 CPU Unit</p>  <p>CPM1A-20CDR-□-V1/20CDT-□-V1/20CDT1-□-V1 CPU Unit</p>  <p>CPM1A-30CDR-□-V1/30CDT-□-V1/30CDT1-□-V1 CPU Unit</p>  <p>CPM1A-40CDR-□-V1/40CDT-□-V1/40CDT1-□-V1 CPU Unit</p> 	<ul style="list-style-type: none"> - Except for depth, the height and width of CP1E CPU units is same as CPM1A and CPM2A CPU unit. The depth of CP1E CPU units is larger than CPM1A and CPM2A CPU units. - All dimensions of CP1W expansion (I/O) units is same as CPM1A expansion (I/O) units <p>CP1E-E10D□-□</p>  <p>CP1E-□20D□-□</p>  <p>CP1E-E20SD□-□</p>  <p>CP1E-□30D□-□</p> 

Product discontinuation
Model CPM1A, CPM2A series

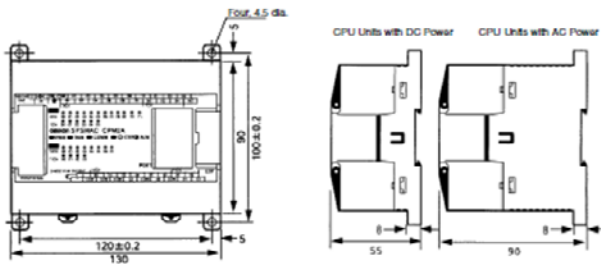
Recommendable replacement
Model CP1E series

CPM2A CPU units

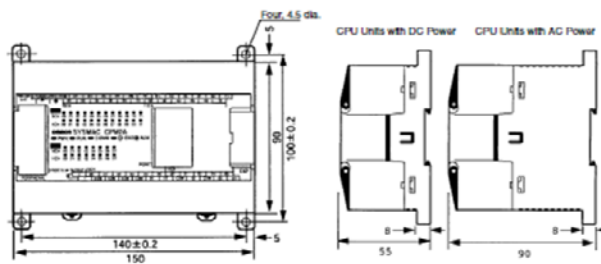
CPM2A-20CD□-□ CPU Units



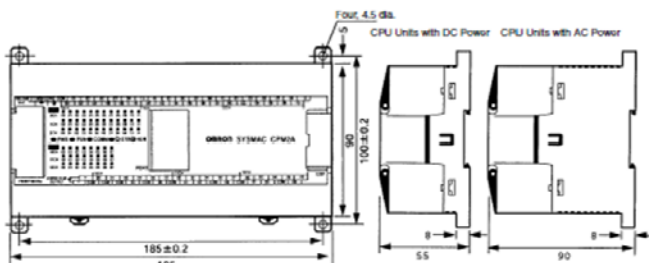
CPM2A-30CD□-□ CPU Units



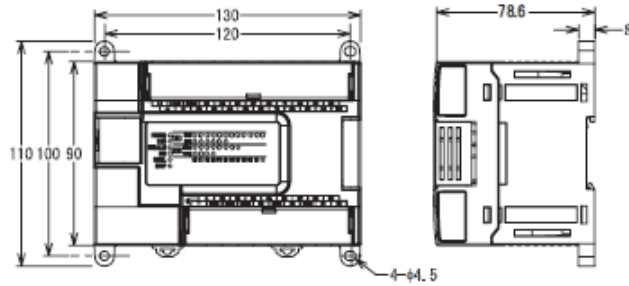
CPM2A-40CD□-□ CPU Units



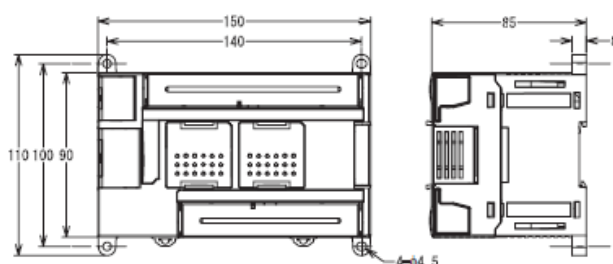
CPM2A-60CD□-□ CPU Units



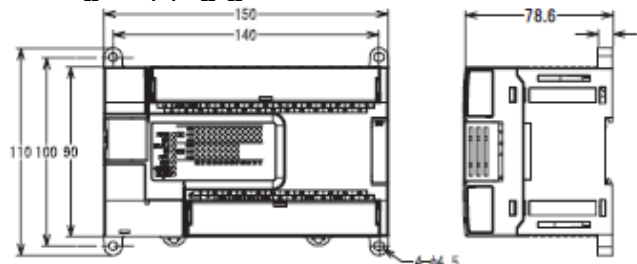
CP1E-□30S(1)D□-□



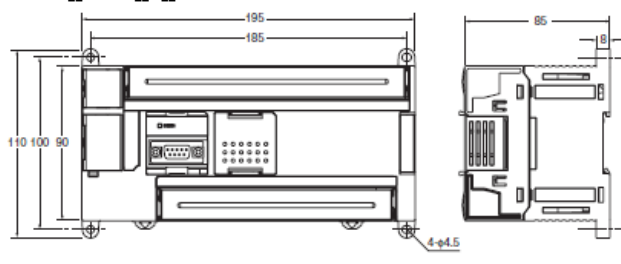
CP1E-□40D□-□



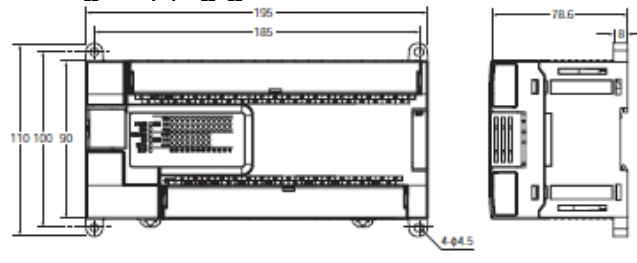
CP1E-□40S(1)D□-□



CP1E-□60D□-□



CP1E-□60S(1)D□-□



[Characteristics]

Specification and performance comparison between CPM1A and CP1E

Item	Product discontinuation Model CPM1A series	Recommendable replacement Model CP1E series	
	CPM1A-□□□□-□	CP1E E□□□S-type CP1E E□□□-type	CP1E N□□□S(1)-type CP1E N□□□-type
Maximum number of I/O points	10 to 180 points	10 to 180 points	
Number of Expansion Units connected	10 and 20-point type: None 30 and 40-point type: 3 units	10, 14 and 20-point type: None 30, 40 and 60-point type: 3 units	
Power supply Operating voltage range Power consumption	AC power supply models: 100 to 240 VAC Operating voltage range: 85 to 264 VAC Power consumption 10, 20-point type: 30 VA max. 30, 40-point type: 60 VA max. DC power supply models: 24 VDC Operating voltage range: 20.4 to 26.4 VDC Power consumption 10, 20-point type: 6 W max. 30, 40 -point type: 20 W max.	AC power supply models: 100 to 240 VAC Operating voltage range: 85 to 264 VAC Power consumption 10, 14, 20-point type: 15 VA max./100 VAC, 25 VA max./ 240 VAC 30, 40, 60-point type: 50 VA max./100 VAC, 70 VA max./240 VAC DC power supply models: 24 VDC Operating voltage range: 20.4 to 26.4 VDC Power consumption 10-point type: 9 W max., 14, 20-point type: 13 W max. 30, 40, 60-point type: 20 W max.	
Output type	Relay or transistor outputs	Relay or transistor outputs	
Terminal block	Fixed	Fixed	
External power supply	AC power supply models only 30/40-point CPU Unit: 300 mA 10/20-point CPU Unit: 200 mA	AC power supply models only 30/40/60-point CPU Unit: 300 mA 10/14/20-point CPU Unit: None CP1E 10/14/20 pts CPU units don't support external power supply function. If external power supply function is necessary when using CP1E 10/14/20 pts CPU unit, please use CP1L 10/14/20 pts CPU unit.	
Program capacity	2 K words not including comments, symbol table, and program indices	2 K steps including comments, symbol table, and program indices	8 K steps including comments, symbol table, and program indices
DM Area capacity	1 K words	2 K words D0 to D1499 can be backed up to EEPROM.	8 K words D0 to D6999 can be backed up to EEPROM.
Instructions	Approximately 90 instructions	Approximately 200 instructions	
Instruction execution time	LD: 1.72 μs, MOV: 16.3 μs	LD: 1.19 μs, MOV: 7.9 μs	
High-speed counter input			
Mode	Incremental pulse inputs: 5 kHz × 1 counter or Differential phase inputs (× 4): 2.5 kHz × 1counter	Up/down, pulse + direction inputs: 10 kHz × 2 counters or Differential phase inputs (× 4): 5 kHz × 2 counters or Incremental pulse inputs: 10 kHz × 6 counters Note: 10 kHz × 5 counters for 10-point CPU Unit	Up/down inputs: 100 kHz × 1 counter, 10 kHz × 1 counter or Pulse + direction inputs: 100 kHz × 2 counters or Differential phase inputs (× 4): 50 kHz × 1 counter, 5 kHz × 1 counter or Incremental pulse inputs: 100 kHz × 2 counters, 10 kHz × 4 counters
Control method	Target matching/ Range comparison	Target matching/ Range comparison	
Quick-response inputs	4 inputs	6 inputs (4 inputs only for 10 I/O inputs)	
Input interrupts	4 inputs	6 inputs (4 inputs only for 10 I/O inputs)	

Item		Product discontinuation Model CPM1A series	Recommendable replacement Model CP1E series	
		CPM1A-□□□□-□	CP1E E□□S-type CP1E E□□-type	CP1E N□□S(1)-type CP1E N□□-type
Pulse outputs	Pulse output method	Single-phase pulse	Pulse output function not included	Pulse + direction mode only
	Speed control	Included		Included
	Positioning	Included (trapezoidal control not included)		Included
	Origin searches	Not included		Included
PWM outputs		Not included	Not included	1 output
Analog adjusters		2 adjusters	2 adjusters: CP1E-E□□/N□□-type only Note: CP1E-E□□S/N□□S(1)-type do not have this function.	
Peripheral port		C-series peripheral port	USB2.0 Full-speed (12M)	
Programming Console		Can be connected	Cannot be connected CP1E CPU units don't support Programming Console.	
Built-in serial communication port		None	None	N□□/N□□S: (RS-232C) N□□S1: RS-232C + RS-485
Serial option port		None	None	N□□ only 14/20-point CPU Unit: None 30/40/60-point CPU Unit: 1 port
Serial communication protocols		Connected CPM1-CIF01/CIF11 to peripheral port.	Not included	RS-232C port, RS-485 port or serial option port
	Baud rate	1200/2400/4800/9600/19.2k	No communication port	1200/2400/4800/9600/ 19.2k/38.4k/57.6k/115.2k
	Compatible protocols	Host Link Peripheral bus NT Link (1:1) 1:1 link (master) 1:1 link (slave)		Host Link No-protocol mode NT Link (1:N) *1 *2 Serial PLC Links (master) *3 Serial PLC Links (slave) Modbus-RTU
Mountable Option Boards		Option Board cannot be mounted. The followings can be connected to peripheral port: RS-232C Adapter CPM1-CIF01 RS-422A Adapter CPM1-CIF11	Option Board cannot be mounted.	N□□ only RS-232C Option Board CP1W-CIF01 RS-422A/485 Option Board CP1W-CIF11/12 Ethernet Option Board CP1W-CIF41 The followings cannot be mounted: LCD Option Board CP1W-DAM01
Battery		None Battery cannot be mounted.	None Battery cannot be mounted.	None Optional battery (CP1W-BAT01) can be mounted.
Capacitor backup		20 days (at ambient temperature of 25°C)	50 hours (at ambient temperature of 25°C)	40 hours (at ambient temperature of 25°C) If long time back up is necessary, please mount the CP1W-BAT01 Battery.
Clock (RTC)		Not included	Not included	Included

Specification and performance comparison between CPM2A and CP1E

Item	Product discontinuation Model CPM1A series	Recommendable replacement Model CP1E series	
	CPM2A-□□□-□	CP1E E□□S-type CP1E E□□-type	CP1E N□□S(1)-type CP1E □□-type
Maximum number of I/O points	20 to 180 points	10 to 180 points	
Number of Expansion Units connected	20, 30, 40 and 60-point type: 3 units	10, 14 and 20-point type: None 30, 40 and 60-point type: 3 units CP1E 20 pts CPU units don't support expansion units. If it is necessary to connect expansion units, please use CP1E 30pts CPU unit.	
Power supply	AC power supply models: 100 to 240 VAC Operating voltage range: 85 to 264 VAC Power consumption: 60VA max. DC power supply models: 24 VDC Operating voltage range: 20.4 to 26.4 VDC Power consumption: 20 W max.	AC power supply models: 100 to 240 VAC Operating voltage range: 85 to 264 VAC Power consumption 10, 14, 20-point type: 15 VA max./100 VAC, 25 VA max./ 240 VAC 30, 40, 60-point type: 50 VA max./100 VAC, 70 VA max./240 VAC DC power supply models: 24 VDC Operating voltage range: 20.4 to 26.4 VDC Power consumption 10-point type: 9 W max., 14, 20-point type: 13 W max. 30, 40, 60-point type: 20 W max.	
Output type	Relay or transistor outputs	Relay or transistor outputs	
Terminal block	Detachable	Fixed	
External power supply	AC power supply models only 300 mA	AC power supply models only 30/40/60-point CPU Unit: 300 mA 10/14/20-point CPU Unit: None CP1E 10/14/20 pts CPU units don't support external power supply function. If external power supply function is necessary when using CP1E 10/14/20pts CPU unit, please use CP1L 10/14/20 pts CPU unit.	
Program capacity (External specification. Add 1 K step for internal specification)	4 K words not including comments, symbol table, and program indices	2 K steps including comments, symbol table, and program indices	8 K steps including comments, symbol table, and program indices
DM Area capacity	2 K words	2 K words D0 to D1499 can be backed up to EEPROM.	8 K words D0 to D6999 can be backed up to EEPROM.
Instructions	Approximately 120 instructions	Approximately 200 instructions	
Instruction execution time	LD: 0.64 μs, MOV: 7.8 μs	LD: 1.19 μs, MOV: 7.9 μs	
High-speed counter input			
Mode	Incremental pulse, up/down, pulse + direction inputs: 20 kHz × 1 counter or Differential phase inputs (× 4): 5 kHz × 1 counter	Up/down, pulse + direction inputs: 10 kHz × 2 counters or Differential phase inputs (×4): 5 kHz × 2 counters or Incremental pulse inputs: 10 kHz × 6 counters Note. 10kHz × 5 counters for 10-point CPU Unit	Up/down inputs: 100 kHz × 1 counter, 10 kHz × 1 counter or Pulse + direction inputs: 100 kHz × 2 counters or Differential phase inputs (× 4): 50 kHz × 1 counter, 5 kHz × 1 counter or Incremental pulse inputs: 100 kHz × 2 counters, 10 kHz × 4 counters
Control method	Target matching/ Range comparison	Target matching/ Range comparison	
Quick-response inputs	4 inputs	6 inputs (4 inputs only for 10 I/O inputs)	
Input interrupts	4 inputs Direct mode or counter mode	6 inputs (4 inputs only for 10 I/O inputs) Direct mode only	

Item		Product discontinuation Model CPM1A series	Recommendable replacement Model CP1E series	
		CPM2A-□□□□-□	CP1E E□□□S-type CP1E E□□□-type	CP1E N□□□S(1)-type CP1E □□□□-type
Pulse outputs	Pulse output method	Pulse + direction mode, CW/CCW	Pulse output function not included	Pulse + direction mode only
	Speed control	Included		Included
	Positioning	Included		Included
	Origin searches	Not included		Included
PWM outputs		2 outputs	Not included	1 output
DIP switch on front panel (SW)		Communications setup	None: CP1E-E□□□/N□□□-type only (The CP1E-E□□□S/N□□□S(1)-type do not have this function.)	
Analog adjusters		2 adjusters	2 adjusters	
Peripheral port		C-series peripheral port	USB2.0 Full-speed (12M)	
Programming Console		Can be connected	Cannot be connected CP1E CPU units don't support Programming Console.	
Built-in serial communication port		RS-232C	None	N□□□/N□□□S: RS-232C N□□□S1: RS-232C + RS-485
Serial option port		None	None	14/20-point CPU unit: None 30/40/60-point CPU Unit: 1 port
Serial communication protocols		Built-in RS-232C port and Connected CPM1-CIF01/CI F11 to peripheral port.	No communication port	RS-232C port or RS-485 port or serial option board
Baud rate		1200/2400/4800/9600/19.2k		1200/2400/4800/9600/19.2k/38.4k/57.6k/115.2k
Compatible protocols		Built-in RS-232C and peripheral ports can be used for Host Link No-protocol mode Only built-in RS-232C port can be used for NT Link (1:1) 1:1 link (master) 1:1 link (slave) Only peripheral port can be used for Peripheral bus	No communication port	Host Link No-protocol mode NT Link (1:N) *1 *2 Serial PLC Links (master) *3 Serial PLC Links (slave) Modbus-RTU
Mountable Option Boards		Option Board cannot be mounted. The followings can be connected to peripheral port: RS-232C Adapter CPM1-CIF01 RS-422A Adapter CPM1-CIF11		Option Board cannot be mounted.
Battery		Built-in battery	None Battery cannot be mounted.	None Optional battery (CP1W-BAT01) can be mounted.
Capacitor backup		5 minutes (at ambient temperature of 25°C)	50 hours (at ambient temperature of 25°C)	40 hours (at ambient temperature of 25°C)
Clock (RTC)		Included	Not included	Included

For more details, please refer Replacement guide.

Replacement guide from CPM1A to CP1E (P083-E1-02)

Replacement guide from CPM2A to CP1E (P084-E1-02)

Specifications and prices in this product news are as of the issue date and are subject to change without notice.
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